

Water Classification Workgroup

Sept. 4, 2013, 9:00am-12:00pm

Bill Whipps – Housekeeping, general comments, updates on future meetings being scheduled. Bill noted that John Hoke was out due to death in family.

Ed Galbraith - Asked that the order of information listed on the Rules in Development webpage be rearranged, appears confusing.

Lorin Crandall - Asked about the intended comment period, 30 days after November 6?

Bill Whipps - Responded that it's not a comment period for the protocol, but for the draft rule, which is Sept. 18.

Lorin Crandall – This is included by reference in the draft rule language, so comments submitted for this would be due Sept. 18.

Bill Whipps – Comments don't need to be in by Sept. 18 for the protocol, we will continue to work on this until November. Does not know if the CWC will approve or disapprove, not something EPA approves or disapproves.

Introductions of attendees

Anna Nowack: Presentation on interactive map viewer and user guide.
Comments:

Leslie Holloway - Asked for clarification on lines as seen on the screen image.

Lorin Crandall – Asked if you can do it by water body identification too?

Anna Nowack - Yes

Michael Bolinger - (on telephone) My experience is that there is a limited number of addresses, don't know how the data set is, that are actually searchable.

Chris Wieberg – From a perfect standpoint we use this type of tool quite a bit, typically use the township/section/range, gets you close enough to see what you need to see.

Michael Bolinger – To the extent that an individual wants to comment on a particular section, what is the key identifier we would utilize to guide you to look at a particular area we want to submit a comment on?

Anna Nowack – Clarified that it depends on what you want to comment on.

Michael Bolinger – Example would be a stream segment we feel is mistaken or inappropriately included, we could pull up that data but we don't know what information to include in comments to guide you (DNR) to that specific stream segment we are focusing on.

Anna Nowack – Provided some information on how to identify the stream segment.

Lorin Crandall – So what we see in the interactive map viewer is not a complete representation of the proposed 100K rule because you have not substituted fully all of the 24K segments that are what the VST covers.

Anna Nowack – We are on the 1:24K line work.

Lorin Crandall – Is the line work the complete 24k data set or the 24k selected where it coincides with the 100k VST?

Anna Nowack – Where it coincides with the 100K VST.

Chris Zell – Asked about merger of attribute information and how the differences between MoRAP dataset and our existing water body classifications/uses are going to be merged. Discussed second order cool water streams, no classified waters upstream of that segment, so when we bring in 1to100k and we have classified waters upstream of that, will all those be cool water streams, warm water?

Bill Whipps – Very few coming in as cold water, some labeled unknown, most are warm water.

Chris Zell – Will there be a document developed on the fly on the decision junctions or on how these attributes are applied to unclassified waters?

Anna Nowack – We can, most are internal documents now on transferring the data.

Robert Brundage – Thought the last few months we have been filling in gaps on the map that didn't show the 1to100k extent, doesn't understand the attributes stuff, what does the VST have to do with where the 1to100k ends?

Anna Nowack – Clarified the question. We are using the VST linework to determine which 24K flowlines are included in this rulemaking.

Bill Whipps – Added additional clarification.

General discussion of 1to100k issues/clarification took place.

Anna Nowack – The way to tell a line has been added because of MoRAP, it is missing from the 1to100k and therefore we used MoRAP to close that gap, there would not be a reach code assigned to it because they are not part of the 1to100k data set. MoRAP used digital elevation model to fill in those gaps.

Mike Kruse – If you brought it in from the 24k would it bring in the 24k reach code?

Anna Nowack – Yes, good point.

Trent Stober – In those circumstances MoRAP provided the 1to100k resolution in areas that had the lower resolution right? You did not have to trim back to the 24k for the 100k in those spots?

Anna Nowack – We did because we use the 1 to 24k line work, so we had to transfer the 100k extent out of this network.

Lorin Crandall – Did we go back through the 100k lakes layer with the VST to select intersecting water bodies?

Anna Nowack – Not yet, we are not done with the VST.

Trent Stober – That's an over-arching concern in this whole process, we have an incomplete dataset, and a public comment period due in two weeks, it raises the question of the whole regulatory process, so I assume with all this that the language in the rule trumps what this dataset comes across as.

Anna Nowack – The dataset is a work in progress. We took the previous 100k flow lines we made and filled in the gaps with VST line work so this data set you see isn't even usable right now, because the reach codes don't match up with any other data we have in the department. We still have to update this data set so we can use it. The reason for that is something out of our control, the USGS came out with a completely new NHD model and wiped out any reach referencing we had, we had to go through and update every one of our data layers, and since this one was so big and took so long to build on its own, and then it wasn't accepted, we didn't bother updating it. We were also going ahead with the VST attribute information. We are using it since it does have that spatial reference but it has some issues with it – the reach codes don't match up, the spatial reference isn't exact. We do have some gaps due to revisions on table H from last rule making. We are going to fix those.

Trent Stober – The rule language itself is the definition of what those designated use extent will go to, right? This dataset will get cleaned up over time, as we see the datasets we can say we now have a dataset that we don't believe fits within the use designation framework because of this reason.

Anna Nowack – I will be cleaning up this dataset and doing initial review. It is a constant process of looking at it to make sure it is correct. We entered into an MOU with USGS to be stewards of the NHD.

Lorin Crandall – Is that at the 24k scale? Do we continue drawing lines saying we are not going to protect these 24k streams even though we verify they flow, that they exist, that they have attributes more than are being put on the map, officially as stewards of the NHD, at the same time we are defining, you are the steward of the waters of the US yet the rule excludes waters of the US from it. Seems like there is a conflict there.

Anna Nowack – The NHD isn't used to define waters of the US.

Lorin Crandall – How are people supposed to provide meaningful comments when segments are not included on the map? What is the difference between a UAA and a map revision?

Lorin Crandall – Shows why a map is impossible to use to truly do what the CWA defends. Constant revisions, nothing concrete to stand on. Found numerous disconnects in this dataset.

Bill Whipps – Keep in mind this is a tool, everything we do is based on a map and tool.

Randy Sarver – Existing use, should be easier to handle than some of these revisions. You are talking about a stream/lake that exists.

Lorin Crandall – How do you show an existing use, do you have a protocol for that?

Ed Galbraith – Question on impoundments capturing storm water, connected to a flow line in the dataset. We should comment on those during this comment period, right?

Bill Whipps – You could, we are not counting WWT structures and stormwater control structures, they are not part of the CWA. I believe the lake network is what we proposed the last rule making, so we are not doing anything new there.

Lorin Crandall – Rebuttal of presumption – he shouldn't have to review all this data.

Bill Whipps – Those are good comments to submit.

Trent Stober – We can talk about the GIS layers ad nauseum, and the rule is pretty clear, we have all worked on it for 3 or 4 years, it's clear what is in this rule package, whether it's in that use designation data set which is still in the process of being cleaned up, so if we focus on the rule as perennial streams, streams with intermittent flow and permanent pools, 1to100k dataset, then we have our use designation process and framework. We can clean this up as we see that there are waterbodies that should be in or out based on that designation.

Anna Nowack – This interactive map is to give you a visual of the rule language, more for if you are trying to find a water of interest. It's not to look at the entire 100k extent because you won't be able to see anything accurately.

Lorin Crandall – Can you show me the protected wetlands?

Ed Galbraith – 33% of our time is gone, let's move on, thank you Anna, you did a great job.

Break 10:15 am

Bill Whipps: provided the Missouri Aquatic Habitat UAA: Water Body Survey and Assessment Protocol document on the screen. He opened the floor to discussion topics relative to the UAA protocol. He mentioned that he would not go over all of the document, this is just a listening session, reminder that this is a draft, we are aware of gaps, and this is an opportunity to provide feedback.

Ed Galbraith – Could Bill talk to some of the gaps? What are they?

Bill Whipps - We are aware of gaps, just wanted it out for people to chew on. We are working on more detail to satisfy UAA factors, working on language, interviews may be a useful tool, refine that more. Clear definitions of what we see as attainable, what criteria we want, should it be here or another document.

Chris Zell – We have this new data set, can you take us on a road trip for smaller urban water, what does that UAA look like? Perhaps an urbanized ditch that's been hydromodified? Can you take us through that process?

Bill Whipps – Feels the protocol already does that. Habitat assessment looking for aquatic life. We reference using the aquatic habitat protocol, filling in that information, using that information.

Robert Brundage – Are you supposed to count macroinvertebrates in a concrete ditch? Right now you are supposed to according to protocol?

Randy Sarver – Some of those things we look at as a no-brainer, but you still have to prove it, you assume there is not much there in a concrete ditch, and that's true, there are some things that live in a concrete ditch, if you have biological criteria then you can go ahead and sample and look at attainment of the use if you have some criteria to base it on. You can't just walk out there and say it is a lost cause. I don't think that is acceptable, that's what criteria are for, do the survey, look at the biological criteria, look at the community.

Robert Brundage – what are the criteria for a concrete ditch?

Randy Sarver – At one time, if it was a stream to begin with, at some point in time it had some natural features, we would base it on a similar size, similar class of stream, based on a reference condition, that is what it would be measured against, best available reference.

Robert Brundage – So, say you should have a score of 16, but you have a score of 2.....

Randy Sarver – Two different situations, either you have an error or you have a modified category that meets one of these six factors. We can't reverse one of the factors. The first step is looking at the biological community, can it/does it attain the use or not? If it can then there is no reason to do any modification. If it can't meet the criteria you have to decide why. Is it one of these factors? Is it actually impaired? It could potentially meet the use.

Lorin Crandall – Do you have to be real specific about what's modified and what's not? We have an issue with modified because we don't accept that it's an acceptable use, we also feel it could incentivize modifying segments that you don't want to be protected. Gave River des Peres as an example. Don't want to incentivize destroying streams.

Robert Brundage – There is no incentive to destroy a stream, that's illegal. You can't dump concrete in a stream, that's against the law.

Lorin Crandall – You can get a 404 permit.

Robert Brundage – You can get a 404 permit, but you have to pay certain compensation, there is no incentive there.

Randy Sarver – Section 131.10(g), not sure why it's there, there are some existing conditions to modify.

Ed Galbraith – When you are faced with the factors/conditions Chris described and you read through this it's like getting a jack hammer to kill a flea, but what Randy is saying that through the process you pare that down and say this is a no-brainer.

Chris Zell – Is there going to be some consideration for no-brainers at some point? Will biocriteria in the future have to have the same VST size code? What are the biocriteria thresholds? Asking for clarification on this point.

Randy Sarver – We are pulling in a lot of stream miles we don't have much data on, where we have numbers we use the numbers, where we don't we interpret by narrative criteria. Using tiered aquatic use language from EPA to define that interpretation. Does not see the burden falling on anyone doing the modification to go out and sample the candidates. We should be deriving the criteria, that's our burden.

Randy Crawford – That is the question I had, that it looked like the burden would fall on the applicant, and not the state. We need some clarification that that data would be usable and not derived from the state.

Randy Sarver – Might be helpful but not necessary to have information from candidate references. Discussed step-wise progression of language, definitions in categories for aquatic life use, these exercises were done in Region 7 years ago to come up with this language, professional biologists worked on it. Where there is no numeric criteria you have to interpret.

Randy Crawford – As part of the study you and MU are looking at, are they looking at all the different potential metrics, or are we assuming the four metrics are going to apply?

Randy Sarver – They are looking at a more quantitative way of looking at reference streams and generate candidate reference streams.

Bill Whipps – One option would be for folks to select candidate reference streams for waterbodies using VST size classes. Mentioned Cave Springs example.

Randy Sarver – We have used candidate reference streams for quite a while for out of network. It takes a while to verify a stream is reference quality, then adopting them as reference streams. To predict them using landscape scale features, not use biology so much as a predictor.

Randy Crawford – So, if someone is studying a small stream, if they don't select a candidate reference stream, there is no comparison and they have to go back to regional reference streams, a lot of times those don't measure up. Seems like the onus is still on the one doing the investigation.

Randy Sarver – That’s what we have right now, class C and P – that’s the only classification we have to work with.

Anna Nowack – From a data maintenance standpoint I see C and P going away or being used in a different way vs. classifying a size, we would move towards adopting that headwater, creek, small river vs. C and P. We could keep C and P around in table H for permitting purposes, but for classification standpoint it’s just not usable.

Randy Sarver – Noted that this discussion would be good for a planning meeting. Who is going to collect that kind of information, the department? It’s not totally necessary but if everyone would be more comfortable with actual information from candidates then we would have to figure out a way to do that.

Matt Combs – Who’s going to do that, the sentence generating this discussion is “therefore until numeric criteria can be established macroinvertebrate data for these stream sizes must be interpreted through narrative criteria and reference communities established in conjunction with individual stream studies.” Page 19, Section 4.4.7.1.

Trent Stober – Asking over-arching question – you hit on some modified waters, like River des Peres, etc. Let’s talk about Blue River – has some limitations. Also the point of ephemeral and Anna brought it up that class C and P are going away over time.

Bill Whipps – there are no immediate plans to get rid of those.

Trent Stober – But they are reference, then you look at the rest of the rule and they are not really, after the definition of what class C, P and E is, they are not referenced in the regulation.

Anna Nowack – I didn’t say that, I said from my data maintenance standpoint class C and P won’t be what we do the classification from. We may still have it in the table, usable in whatever manner we see fit, but from a classification standpoint I don’t see them being used.

Trent Stober – Right, I’m saying the rule, at the RIR stage you had ephemeral uses in the rule but that got excluded and now it’s just class E as it stands now, and then class E after it is defined is not referenced any more. Low flow ephemeral conditions seem to get lost in the shuffle. Thought the intent was to see if there was water in the stream, no water, what’s the use to collect fish, bugs, habitat data if we get out and it’s a pasture?

Bill Whipps – Well, if it’s a pasture vs. a defined stream channel that happens to be dry that’s where we need to clarify where we are at on the continuum. Does that mean it may be dry when you go out there, is there aquatic life there when it rains? We can’t just go out there once and say it’s dry and won’t sustain aquatic life.

Bob Angelo – Have to demonstrate you are dealing with a reasonably normal period – no water – demonstration of non-attainment could be made.

Trent Stober – So in that case a channel is dry all the time, is there an opportunity to go out and start talking about the number of times per year you would do that to verify there is no water present, other than during storms, that UAA factor extends beyond ephemeral, there are intermittent streams as well. We recognize that if there are permanent pools there that have aquatic life beneficial use, then there is the discussion as to how long that water has to be there to support aquatic life. Go back to the big picture I can see the pathway through this protocol if you go to factor two that it is more streamlined version of demonstrating whether there are permanent pools present vs. three or four that might be more of the Blue Rivers of the world that are modified, and maybe that's a more expensive evaluation for some of those modified resources.

David Carani – So, the bigger question is are there going to be clearer thresholds in the six factors?

Bill Whipps – We need to make clearer thresholds for each of these factors and your input is welcome.

Trent Stober – The on-ramp, if you will, the inclusion of more waters in the dataset, would take some evaluation to show there are permanent pools there, that same process should be how you say we had this reach that was designated in the line work but has no permanent pools, I like your reference to losing streams, obviously that will influence the attainability of the use in a lot of these settings.

Randy Sarver – I've got some real-world examples, some basic pilot studies, I know a place that is a parking lot but shows up on the line work, whether it was existing before I don't have the answer to that question, but there is no channel there.

Trent Stober – Going back to Robert's comments, if that went through the appropriate permitting process then that's done, right?

Randy Sarver – Not necessarily, might have to dig deeper into information

Trent Stober –Over-arching, there should be a simplified way to bring waters in that need to have designated uses applied to them. That same process should be a way to clean up the designation of uses where there is not an intermittent stream with permanent pools that can support aquatic life.

Lorin Crandall – I can understand if you are representing permitted point source discharges you want to have the appropriate use designations so that your effluent limits are calibrated, but don't you want upstream segments protected in the sense that then they have a chance to be monitored and showing the point source discharge in said watershed on said extent is a small amount compared to the NPS coming in from upstream? Don't these added upstream protections actually help point source dischargers in helping balance the scales a little bit on that?

Trent Stober – I'm not a point source discharger, I live within one, but I think most of the regulated entities just want appropriate uses assigned to waterbodies. If that upstream source has water in it then those uses should apply.

Bill Whipps – If you have a big shopping mall, if you look at the stream network and it shows line work through what is obviously a huge shopping mall clearly you don't have to go out and do a habitat assessment because it is a shopping mall. But if there is a stream network with water in it upstream of

that I would imagine it has to go somewhere, pipes underneath that continue it downstream, so then that upstream segment may still be fair game, but a case may be made to remove the use on that parking lot.

Trent Stober – wants streamlined way to bring waters into and out of the dataset based on whether or not it is in factor 2, or whether there is a water out there that not in the line work that doesn't fit in factor 2, basically low flow conditions, ephemeral/intermittent conditions.

Bill Whipps – I hear that, trying to make it as streamlined as possible keeping in mind that the presumptive nature of the CWA presumed to have a use unless shown otherwise.

Ed Galbraith – By going through each of these you are listing more what types of information, what types of circumstances, to meet each one of these, you are headed down the path that Trent suggested.

Trent Stober - Maybe just missing a decision tree.

Bill Whipps – There is a decision tree or two at the end of this document I don't know if it addresses what you were looking for.

Trent Stober – Yes, to me it would be a step before, almost at the beginning.

Anna Nowack – So are you asking how to tell where the ephemeral stream cutoff is from further upstream?

Ed Galbraith – Yes, a streamline process that you go thru, the first questions you ask, photo document, kind of what was in the old stream classification.

Anna Nowack – Tennessee has a process to determine if a stream is ephemeral or not, if it is then it falls in to their classification.

Bill Whipps – We hope to have more clarification for each one of those UAA factors the next time we meet in several weeks.

Robert Brundage – Item 4, the technical subcommittee – who is that?

Bill Whipps – We don't know who that will be yet, we would hope folks from WPP, ESP.

Robert Brundage – I thought the technical subcommittee was leading the discussion today.

Lorin Crandall – He is asking is there already a technical subcommittee or are we forming one today? Agenda item #4.

Bill Whipps – I didn't write this agenda, but I think he was referring to the people in this room.

Robert Brundage – Who are the primary authors of this document?

Bill Whipps – Randy Sarver, Bill Whipps, John Hoke all worked on it. Some of the language is drawn from the original recreational use UAA protocol.

Lorin Crandall – One of the things we noticed is there is no really good streamlined process for citizens to add uses. Do they have to go get a permit from MDC to collect macros to prove things live here, or can they just take a picture that's geolocated and show you what it looks like? What's the process, do they have to get a contract with Trent and who knows how much that will run them, I don't think that's appropriate for citizens trying to protect their streams, especially under the rebuttal of presumption, it's almost, still on its head to do anything to show anything that. What is it that citizens need, what would the protocol be for that?

Bill Whipps – We need to clarify more, we probably want to see a little more than just a photograph, possibly want someone with Level I ST training who can identify macros and follow protocol.

Lorin Crandall – But do they have to prove anything? Isn't it that the use has to be proven unattainable, not attainable? If they can show this has water during normal precipitation period, what else should they truly be responsible for under the rebuttal of presumption?

Bill Whipps – We are adding these waters in the use designation dataset, and those are the waters being brought in. You have a fair point and it's something to think about but I think to add a water that is outside the use designation dataset we want to see some evidence.

Peter Goode – So do you have to show evidence that there is aquatic life, or aquatic habitat, or flow, or do you have to show evidence that it is a jurisdictional water of the US, those are very different things to do and the document makes reference that something different might be needed for adding streams.

Anna Nowack – Lorin, you are talking more like if they're on one of those 1 to 24K headwaters that wasn't included, how do they get that added in there, right?

Lorin Crandall – There are a lot of exclusions from the current 100K rule actually that are not just 1 to 24K ephemeral but in fact significant waterbodies that are essentially permanent pools on intermit flows, so not to mention wetlands, not to mention stream segments that may be upstream, may be on the 24K, and may in fact be very supportive of aquatic life. So I think it covers the whole spectrum, you have at least 600,000 acres of unprotected wetlands that people could be submitting.

Bill Whipps – Keep in mind that there are narrative protections for wetlands in the standards right now, I understand they are not criteria for wetlands and not designating, not looking at designating, not happening in this rulemaking, but the department is working on.

Anna Nowack – That kind of goes back to the fact that all statewide waters are covered under some kind of protection from narrative criteria, but this classification process is a way to define better protection, so you have to classify the water in order to define those better protections, give it those numeric criteria. So it's not saying we don't want to protect them, it's saying we don't have the information to better protect them at the moment, we need help in collecting that information in order to classify them appropriately.

Lorin Crandall – My experience is that the narrative criteria are not effectively enforced all the time, I have some cases in my head, where there was a pretty bad situation that DNR was aware of, was not being dealt with, the excuse we were given was that this wasn't a classified stream, there are no numeric standards.

Ed Galbraith – To sum it up, what's the process for adding lakes, waters or streams that are not in data set, maybe provide some clarification on that.

Randy Sarver – For what use? All uses? Aquatic life use?

Bill Whipps – Aquatic life, credible presumption.

Randy Sarver – What you are asking for is outside this protocol, this is for aquatic life use.

Peter Goode – Specifically fishable and swimmable, the reason this is an issue is because the beginning of the document says adding or removing the aquatic designated life use. This should be used for adding but there is nothing in here about adding.

Trent Stober – Can't we address that by including a streamlined version to take things on and off based on whether water is present?

Lorin-Removing the use is much more significant than adding a use. Removing a use is something that requires UAA/CWA right? Adding is different and should not require a UAA because we have a rebuttal of presumption because there are so many waters and it is so complex. At Busch Wildlife, 34 of 36 lakes are not protected, yet they are there for recreational use, they support aquatic life, on public land, I think someone should be able to take a picture and say why is this not protected, there are not a lot of threats to it, but maybe that will change. They shouldn't have to jump through a lot of hoops, to get to what the CWA already promised us.

Bill Whipps – It's easier to prove something exists when you can see it, than prove that it doesn't exist just because you don't see it one time, these are good points that we need to clarify, send in these comments.

Lorin Crandall – What is modified, again, modified warm water, what is that? You could say the Missouri River is very modified and it is really warm, so is that modified even though it has endangered species in it, so I'm unclear, is it just straightening, is it channelized, what constitutes channelized, you could look at Fishpot Creek and say look how modified this is because the watershed has been so built out that the flow regime is changed, it has eroded everything, you have all these bank stabilization projects to shore up the erosion, where does modified start and stop, is it just based on the aquatic life that's there, or based on geophysical characteristics, or what?

Randy Sarver – As far as we are talking here, the aquatic life UAA, it is the aquatic life, can it support the use or not. We have to define what support means, and we have defined it as numbers or narrative that we have.

Lorin Crandall – So if it can't support the aquatic life then it is modified?

Randy Sarver – If it can't support it then it might be impaired but it wouldn't be a candidate for moving it to a modified category.

Lorin Crandall– So it could be a perfectly natural stream channel that happens to have a couple of elicit toxic discharges to it that wiped out the aquatic communities and that could be modified?

Randy Sarver – No, that's an impaired stream.

Mike Kruse – You have to meet 1 of 6 EPA factors that EPA allows in the CWA, those have to be considered that has to be part of the demonstration.

Randy Sarver – that's where it becomes kind of tricky, to go into these places and do the UAA, that's why the words scientifically defensible is even in the federal language here, we have to distinguish between impairment and trying to move something to one of these modified categories, look at the aquatic community, call it impaired or can it not meet the use because of one of these factors, that's why I have a little problem, not so much on the adding part, but on the removal or modification part definitely. I'm not sure the additional language should be in here or not.

Anna Nowack – We have to remember that classification is different than assigning a designated use. When you classify a water body you build the numeric criteria off that, a designated use is what is the water being used for? These classifications are for aquatic life, you are not using them for assigning a recreational use.

Robert Brundage – At a previous water protection forum meeting, when the rule that was published was discussed, the department said in the meeting, that the, forgive me for using the on ramp off ramp term, said it was the exact same process. You (Lorin) are suggesting it should be a different process, but the department has said the rule language as written is the exact same process.

Lorin – That's the thing we have had so many instances where people were like, hey this is a problem, why are you not doing anything, find out it's an unclassified water, ok, I want to make it classified, well sorry. Ted Heissel had a letter writing campaign to get a portion of one creek in Webster Groves finally added, any type of added classifications requiring a really arduous process has been a big problem for us.

Anna Nowack– You are asking why we have to give it a classification just to get recreational use applied to it?

Lorin Crandall – Why does a citizen have to put time, effort and money into getting something that was already promised by the CWA?

Bill Whipps – For already existing recreational uses, one does not have to go through the entire recreational UAA process to add an existing use or demonstrate an existing use to a water body, we take public comments, interviews, photographic verification.

Anna Nowack– We have the stream use survey out there.

Ed Galbraith— There are horror stories on this, on both sides of the question, people are spending a lot more money on types of horror stories, cities are concerned about paying money for studies to prove that uses don't exist, only to have EPA come back and say no, that's incorrect. So we can catalog our concern but let's have a process for getting the waters in and out that is streamlined and works and makes sense.

Robert Brundage – I have a separate comment, if you have to do a macroinvertebrate study on a small stream should there be a different, modified process on how many individuals are collected how many habitats are collected, those types of things – that's not discussed in here.

Bill Whipps – That's a good point, how many sites in a certain 5 mile or 3 miles, you might be dealing with a relatively small segment/stretch of stream, how many data?

Robert Brundage – Do you need to do as robust an assessment for these?

Randy Sarver – We should do the ground work, sampling, and look at information. I want us to do it based on information.

Randy Crawford – Are we using the same protocol or changing for smaller streams – big effort – need to try to develop good justification, right now we do the same comparisons for larger or smaller streams, none of us are comfortable with this. What do we do in the meantime? Needs a planning committee to agree and decide what we are going to look at.

Randy Sarver – I'd like to do it based on pilot studies. Base it on previous information.

Bob Angelo (voiced by Leslie Holloway because Bob Angelo had laryngitis) – At the point we are at, since we are on a time frame where there needs to be action taken, that if we continue to try to insist from both side that there be more specifics in this language pertaining to reference conditions he doesn't see how we can meet the 9/11 date for the hearing, and 9/18 date for the comments, and suggests that perhaps in the general proposed rule language there be something added that says for purposes of establishing reference that we cite fed regulation language subject to that fed regulation language for removing a use.

Bill Whipps – We are trying to have the UAA protocol finalized by Nov 6

Bob Angelo – That's a big chunk to chew on, to try to get all sides to buy in and finalize that and still have an adequate amount of time for public review, you are talking about a document that you want to incorporate by reference in the WQS, so it will be a dated document, the EPA will be obligated to review that for WQS, one way to get around that and buy yourself some time is to simply put in some generic language at this point that allows uses to be removed based on the factors presented in 40 CFR 131, it would be generic language that would buy you some time to perfect this and at a later time depending on the comfort level of all involved you could decide whether you want to adopt this by reference. In the meantime what would hold the rule up today would be the scientifically defensible UAA that would have to pass DNR review, CWC review and EPA review. So, if you were to go that far you would be going as far as most states go. So all I'm throwing out is a kind of a backstop, if you can't

get this work done to your satisfaction in time for the WQS adoption you might want to consider more like default type language.

Randy Sarver – How many state approved aquatic life UAA procedures are you aware of?

Bob Angelo – very few because typically EPA doesn't approve procedure it will actually try to respect procedures developed by the state, we work with them during the process to make sure they can argue that they are scientifically defensible but when the UAAs are submitted by the state along with the use designation changes we basically evaluate each one of those on its individual scientific merits, trying to respect the state process but we can take a look at the state protocol for recreation, the state can go through that process, they can make a decision based on the evidence that they have interpreted, but the EPA has to be able to make the same argument, if we find that there is evidence of children swimming there we have to evaluate that, whether or not that was included as part of the package that was in the UAA. Basically, those are the kinds of things we look at, if there is historical data that indicated there were depths of water that would support full body immersion those are the kinds of things we might consider after having the ...(unintelligible). So to some extent this is a state process where the state is trying to come up with an agreed upon protocol that almost all the stakeholders can buy in to. That will carry a lot of weight with EPA, when those UAAs are submitted not only will we have gottenwe will consider other types of supplemental information. What I'm trying to say is that this is a rather ambitious rule making, there's a lot that is being put into the water quality standards adoption and the EPA would hate to see some of the gains that are being anticipated as part of this rulemaking held hostage in the completion of this document.

Chris Zell – All those points are very well taken, and having seen how long it takes some states to work on their use assessment procedures I would agree we have a ways to go to do the groundwork that Randy is talking about. What level of commitment is DNR willing to make moving forward into the future and the associated timeline of that commitment to produce those procedures and answer all these quantitative questions. The inclusion of the UAA procedure is something everyone is interested in including in the rule – can we feel good that this will get done?

Randy Sarver – Interpretation sits with you. Interpretation of data, if you are comfortable with that concept, then everything doesn't need to be absolutely nailed down with years and years of numbers. If you can base it on something vetted, a way to interpret/use narrative criteria, then it can be done, but if you are waiting on numbers for everything it could be a very long time.

Chris Zell – Is that long time dictated by interests, funding, all of the above? How can we accelerate or focus on that so it gets done? It's not an easy question.

Randy Sarver – It's on our radar screen, we need a longer term plan in place that says this is what we are going to work towards, and funding some of these projects, we are trying to lay the groundwork for what can happen in 3 year, 6 years, we are talking long-term.

Chris Wieberg – I assume wherever this UAA protocol is at, at the time it needs to be incorporated by reference, will be at the point at which the department makes the decision whether or not to incorporate it by reference, not given the fact that it has to be reviewed and approved by the commission, but this is a document that John Hoke wishes to develop and work with stakeholders to improve.

Trent Stober– Would it be too ambitious to get the process to include waters into the use designation dataset, and remove waters that do not meet the definition of the intermittent permanent pools and perennial streams? That doesn't seem like too ambitious of a goal to come up with a process that says there is water present or not.

Lorin Crandall– On the one hand that makes sense, but can't you study a catchment amount of precipitation and determine how much water is flowing through there over a given period of time and if it isn't there you are dealing with a losing stream or there is a sink somewhere along the way – at some point can't you look at various conditions and determine flow?

Matt Combs – Commented on removing streams based on ephemeral - there are about 5 species of crawfish in Missouri that live in ephemeral headwater channels and they burrow up and down with the water table so there is protected life in some of those headwater streams when there isn't permanent pools, that should be apparent if you are doing the UAA when you come to us for a collecting permit. Not sure how this correlates to the CWA rule about permanent pools, but MDC has the obligation to protect the crayfish.

Trent Stober– They are protected through narrative criteria with the application of acute criteria, if you have water quality data for that stream then you compare that data to acute criteria which should protect for those short time exposures.

Bob Angelo – Going back a little bit, upon initial review of the proposed rule something noticed by EPA is that the reference to the dataset, there is no date, no version, relatively generic reference, but to the extent that was going to be used for regulatory purposes you will have to come up with a version and that version will have to be put out for public notice and people will have to have an opportunity to look at it and review it. A lot of it depends on your language, that is going to have to be very clear on what waters are being protected by the numeric criteria.

Ed Galbraith – I agree, lots of protocols/procedures referenced in the document – wants the document references made available, will help in reviewing document. Would be very helpful.

Bob Angelo – It's unlikely any data set will be perfected in a month, or year. As long as people know what is the prevailing data set for register, that's important. There should be the expectation that it gets better over time.

Robert Brundage – If MO had in our rule that we adopt this document as of the November version, and EPA has to review this document because it is part of the standard, and it is a multiple page document, what are the odds EPA will approve any part of it, or just exclude the whole thing and go by the UAA factors in regulation and that's all you are going to look at?

Bob Angelo – That might be what we do. We have three options – we can approve, we can disapprove, we can take no action, but if there are water quality standards elements in here we may be forced to take some form of action. We might be in a position where we take no actions, EPA is bound by federal regulation and statute.

Bill Whipps – are you talking about the rule or the UAA protocol right now?

Bob Angelo – The reference that is in the rule. So if you adopt specific protocol it could be that EPA is in the position of approving, disapproving or taking no action. We would probably lean toward the latter unless there is something particularly glaring in here that is contradictory to the CWA or federal regulations.

Chris Wieberg – Doesn't the stream classification, classified streams protocol is basically just referencing what the authorities are saying, this is what we are going to use for the UAA – I think John Hoke has an answer for you as it relates to this issue of whether or not the department believes the UAA protocol is in fact a water quality standard or a process folks go through to do a UAA. I don't want there to be confusion about what the department's intent is. If EPA decides not to take action then in essence that is what we are doing anyway.

Randy Sarver – What is the status of 1983 EPA document?

Bob Angelo – It is still referred to, has not been rescinded, many states have greatly improved on it. It must adhere to 6 factors, 40 CFR 141, and scientifically defensible. The state can put that language in its WQS, put a period behind it, or they can do something a little more elaborate. If the stakeholders of the state say no, we want to know what is being meant by DNR to make these determinations, I'm just saying it is not an obligation on federal side, so, to save time, this time around you may want to be silent on the scientific protocol that you're adopting and just adopt the federal language.

Randy Sarver – Even the 1983 guidance/protocol is pretty broad, it tries to cover a lot of bases, and there's no demand you do everything in the document. Has anybody referenced that document to your knowledge?

Bob Angelo – There's a good chance some state has but I can't think of any off-hand. You can adopt by reference any guidance EPA has, just make sure you are applying it in the manner it was intended to be applied.

Lorin Crandall – Iowa did a new water classification thing recently and they had a bunch of UAAs submitted – were those aquatic UAAs?

Bob Angelo – Predominately recreational, EPA did not approve protocol on those.

Leslie Holloway – For the record, there are a few references to studies going on now, could some of the folks here talk about how those differ? Timelines, gap analysis going to be the primary basis for the rule we are going through now and it's been out there for some time, but there are references to the projects that are under way jointly between the department between MDC and DNR, can you help sort through what those timelines are?

Randy Sarver – One referenced in here, the signed cooperative agreement between MDC and DNR and MU, that's what I specifically referred to as the candidate reference list, it is a three year project, complete by 2016. The habitat assessment is a planned project, it is not on the ground at all, step one is to identify the candidate references and get a good idea so we can determine what habitat should be, as

far as this document goes that's where we were wanting to be, to get to the habitat data, but the first step turned out to be that we needed to decide what high quality streams habitat looked like, so identifying those reference quality streams became the first thing we needed to do. Step 2 if we could continue to fund it, would be the three years after that, would be to go back and look at those streams, collect information, and try to generate a habitat index.

Leslie Holloway - There are two others, not referenced in protocol, one is the fish IBI data, that is still on-going correct?

Matt Combs – Yes, we depend on the habitat index because we screen the quality of streams before we determine the quality of the fish.

Leslie Holloway – The last one was, John Ford's communication to bioassessment workgroup about entering a contract with USGS, making recommendations on how DNR should use habitat scores to assess fish community health – is that the same thing?

Randy Sarver – yes, it is the same thing, but a few projects away.

Bill Whipps – Reminder to the group that more meetings are scheduled.